

CLAIMS

1. Drive device for intermittent driving of a conveyor (1) that partly surrounds a drum (3) rotatable around a centre axis (0), which drive device comprises drive member (5, 6) and motion transmission member (4, 7, 8, 9) **characterized in**
- 5 - that the drive member (5,6) is arranged to execute a reciprocating motion
- that the motion transmission member (4, 7, 8, 9), in the motion of the drive member (5, 6) in a first direction, is arranged to impart the drum (3) a rotary
- 10 motion in a first rotary direction and impart the conveyor (1) a motion
- that the motion transmission member (4, 7, 8, 9), in the motion of the drive member (5, 6) in a second direction, is arranged to impart the drum (3) a rotary motion in a second rotary direction in such a way that the conveyor (1) is at rest.
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2. Drive device according to claim 1, **characterized** in that the rotary motion of the drum (3) is substantially equally large in both rotary directions.
3. Drive device according to claim 1 or 2, **characterized** in that the drive
- 20 member (5, 6) comprises an air-operated bellows (5) and a mechanical spring (6).
4. Drive device according to any one of claims 1–3, **characterized** in that the motion transmission member (4, 7, 8, 9) comprises
- an arm (7) connected with the drive member(5, 6),
- 25 - a pressure element (4) connected with the arm (7),
- a neck (8) arranged on at least one of the end surfaces of the drum (3), in which neck the arm (7) is rotatably mounted, and
- a carrier member (9) arranged on said end surface,
- in the motion of the drive member (5, 6) in said first direction, the arm (7)
- 30 being arranged to initially displace the pressure element (8) to abutment against the conveyor (1) and then by means of the abutting pressure element (4) impart the conveyor (1) said motion and simultaneously via the neck (8) and the pressure element (4) impart the drum (3) a rotary motion in said second rotary direction,

- and in the motion of the drive member (5, 6) in said second direction, the arm (3) being arranged to initially displace the pressure element (8) from abutment against (1) the conveyor as well as being brought to abutment against the carrier member (9) and then via the carrier member (9) and the neck (8) impart the drum
5 (3) a rotary motion in said second rotary direction

5. Drive device according to claim 4, **characterized** in that the carrier member (9) and the connection of the drive member (5, 6) with the arm are located on one side of a plane through the centre axis (0) of the drum, and that the neck (8)
10 and the pressure element (4) are located on the opposite side of said plane.

6. Drive device according to claim 4 or 5, **characterized** in that the pressure element (4) is rod-shaped and parallel to the drum (3) and extends along the major part of the length of the drum (3).
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7. Drive device according to any one of claims 1–6, **characterized** in that the drive member (5, 6) is controlled to alternate between inactive, relatively long periods, when it is idle, and active, relatively short periods when it executes some strokes.
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8. Drive device according to any one of claim 4 or 5, **characterized** in that the conveyor (1) is a movable floor of an animal-farming unit.

9. Method for intermittent driving of a conveyor (1) that partly surrounds a
25 drum (3) rotatable around a centre axis (0), **characterized** in that the drive takes place while alternating between a first and a second stage, during the first stage the drum (3) being imparted a motion in a first rotary direction while the conveyor being imparted a motion, and during the second stage the drum (3) being imparted a motion in a second rotary direction while the conveyor (1) being kept at rest.

30 10. Method according to claim 9, **characterized** in that the method is exercised by means of a drive device according to any one of claims 1–8.
